



SEQUENCE LISTING

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Yagi, Shintaro

<120> METHOD FOR MEASUREMENT OF HEPATITIS C VIRUS

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<151> 1999-07-30

<160> 11

<170> PatentIn version 3.1

<210> 1
<211> 177
<212> PRT
<213> Hepatitis C virus

<400> 1

Met Lys Ala Ile Phe Val Leu Lys Gly Ser Leu Asp Arg Asp Pro Glu
1 5 10 15

Phe Met Gly Thr Asn Pro Lys Pro Gln Arg Lys Thr Lys Arg Asn Thr
20 25 30

Asn Arg Arg Pro Gln Asp Val Lys Phe Pro Gly Gly Gln Ile Val
35 40 45

Gly Gly Val Tyr Leu Leu Pro Arg Arg Gly Pro Arg Leu Gly Val Arg
50 55 60

Ala Thr Arg Lys Thr Ser Lys Arg Ser Gln Pro Arg Gly Gly Arg Arg
65 70 75 80

Pro Ile Pro Lys Asp Arg Arg Ser Thr Gly Lys Ser Trp Gly Lys Pro
85 90 95

Gly Tyr Pro Trp Pro Leu Tyr Gly Asn Glu Gly Leu Gly Trp Ala Gly
100 105 110

Trp Leu Leu Ser Pro Arg Gly Ser Arg Pro Ser Trp Gly Pro Thr Asp

115

120

125

Pro Arg His Arg Ser Arg Asn Val Gly Lys Val Ile Asp Thr Leu Thr
130 135 140

Cys Gly Phe Ala Asp Leu Met Gly Tyr Ile Phe Arg Val Gly Ala Phe
145 150 155 160

Leu Gly Gly Ala Ala Arg Ala Leu Ala His Gly Val Arg Val Leu Glu
165 170 175

Asp

<210> 2
<211> 160
<212> PRT
<213> Hepatitis C virus

<400> 2

Met Gly Thr Asn Pro Lys Pro Gln Arg Lys Thr Lys Arg Asn Thr Asn
1 5 10 15

Arg Arg Pro Gln Asp Val Lys Phe Pro Gly Gly Gln Ile Val Gly
20 25 30

Gly Val Tyr Leu Leu Pro Arg Arg Gly Pro Arg Leu Gly Val Arg Ala
35 40 45

Thr Arg Lys Thr Ser Lys Arg Ser Gln Pro Arg Gly Gly Arg Arg Pro
50 55 60

Ile Pro Lys Asp Arg Arg Ser Thr Gly Lys Ser Trp Gly Lys Pro Gly
65 70 75 80

Tyr Pro Trp Pro Leu Tyr Gly Asn Glu Gly Leu Gly Trp Ala Gly Trp
85 90 95

Leu Leu Ser Pro Arg Gly Ser Arg Pro Ser Trp Gly Pro Thr Asp Pro
100 105 110

Arg His Arg Ser Arg Asn Val Gly Lys Val Ile Asp Thr Leu Thr Cys
115 120 125

Gly Phe Ala Asp Leu Met Gly Tyr Ile Phe Arg Val Gly Ala Phe Leu
130 135 140

Gly Gly Ala Ala Arg Ala Leu Ala His Gly Val Arg Val Leu Glu Asp
145 150 155 160

<210> 3
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Fused polypeptide including Hepatitis C virus sequence.

<400> 3

Asp Val Lys Phe Pro Gly Gly Gln Ile Val Gly Gly Val Tyr Leu
1 5 10 15

|Leu Pro Arg Arg
20

<210> 4
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Fused polypeptide including Hepatitis C virus sequence.

<400> 4

Gly Pro Arg Leu Gly Val Arg Ala Thr Arg
1 5 10

<210> 5
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<223> Fused polypeptide including Hepatitis C virus sequence.

<400> 5

Pro Arg Gly Ser Arg Pro Ser Trp Gly Pro Thr Asp Pro Arg His Arg
1 5 10 15

Ser Arg Asn Val Gly
20

<210> 6
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Fused polypeptide including Hepatitis C virus sequence.

<400> 6

Asp Pro Arg His Arg Ser Arg Asn Val Gly Lys Val Ile Asp Thr Leu
1 5 10 15

Thr Cys Gly Phe
20

<210> 7
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for polymerase chain reaction.

<400> 7
gaattcatgg gcacgaatcc taaa

24

<210> 8
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for polymerase chain reaction.

<400> 8
ttagtcctcc agaacccgga c

21

<210> 9
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Portion of Hepatitis C virus sequence.

<400> 9

Thr Asn Arg Arg Pro Gln Asp Val Lys Phe Pro Gly Gly Gly Gln Ile
1 5 10 15

<210> 10
<211> 1197
<212> DNA
<213> Artificial Sequence

<220>
<223> Nucleotide sequence coding for chimeric antigen.

<220>
<221> CDS
<222> (1)..(1188)
<223>

<400> 10 gaa ttc acc aaa gta ccg gtt gct tat gtc ggc aaa ggt tat aag gtc 48
Glu Phe Thr Lys Val Pro Val Ala Tyr Ala Ala Lys Gly Tyr Lys Val
1 5 10 15
ctg gtt ctg gac ccg agc gtt gcc agc acc ctg ggt ttc ggc gcg tat 96
Leu Val Leu Asp Pro Ser Val Ala Ser Thr Leu Gly Phe Gly Ala Tyr
20 25 30
ctg agc aag gcc cat ggt gta aac ccg aac atc cgc acg ggc atc cgt 144
Leu Ser Lys Ala His Gly Val Asn Pro Asn Ile Arg Thr Gly Ile Arg
35 40 45
acc gtt acc acc ggt gct ccg gta acc tat tcc acc tac ggt aaa tac 192
Thr Val Thr Thr Gly Ala Pro Val Thr Tyr Ser Thr Tyr Gly Lys Tyr
50 55 60
ctg gcg gac ggc ggt tgc gcc ggc ggt gtc tac gat gtc atc gga tct 240
Leu Ala Asp Gly Gly Cys Ala Gly Ala Tyr Asp Val Ile Gly Ser
65 70 75 80
gga gag gag gta gcc ctg tct aac act gga gag gtc ccc ttc tat ggc 288
Gly Glu Glu Val Ala Leu Ser Asn Thr Gly Glu Val Pro Phe Tyr Gly
85 90 95
cgc gcg atc ccg atc gaa gcg atc aaa ggc ggt cgc cat ctg gtt ttc 336
Arg Ala Ile Pro Ile Glu Ala Ile Lys Gly Gly Arg His Leu Val Phe
100 105 110
tgc cat agc aag gag aaa tgc gat gaa ctg gcg agc gcg ctg tcc gga 384
Cys His Ser Lys Glu Lys Cys Asp Glu Leu Ala Ser Ala Leu Ser Gly
115 120 125
ttg ggt ctg aac gct gta gca ttc tat cgc ggt ctg gac gtc agc att 432
Leu Gly Leu Asn Ala Val Ala Phe Tyr Arg Gly Leu Asp Val Ser Ile
130 135 140
atc ccg acc cag ggc gat gta gtt atc gtt agc acc gat gtc ctg atg 480
Ile Pro Thr Gln Gly Asp Val Val Ile Val Ser Thr Asp Ala Leu Met
145 150 155 160
acc ggt ttt acc ggc gat ttt gac tca gtc gac tgt aac aca tgc 528
Thr Gly Phe Thr Gly Asp Phe Asp Ser Val Val Asp Cys Asn Thr Cys
165 170 175
atc acc cag gga tct gga ctg gta agc ttc gcg agc cat gtc ccg tac 576
Ile Thr Gln Gly Ser Gly Leu Val Ser Phe Ala Ser His Val Pro Tyr
180 185 190
atc gag cag ggt atg caa ctg agc gaa caa ttt aag cag aag agc ctg 624
Ile Glu Gln Gly Met Gln Leu Ser Glu Gln Phe Lys Gln Lys Ser Leu
195 200 205
ggt ctg ctg cag acc gcg acc aaa cag gcg gag gtc ggc gcc ccg gtc 672

Gly Leu Leu Gln Thr Ala Thr Lys Gln Ala Glu Ala Ala Ala Pro Val			
210	215	220	
gtt ggc acc ccg aaa agc cgc cgt ccg gaa ggt cgt gcc tgg gcg caa			720
Val Gly Thr Pro Lys Ser Arg Arg Pro Glu Gly Arg Ala Trp Ala Gln			
225	230	235	240
ccg ggt acc atc atc ctg agc ggt cgt ccg gcg gtt gta ccg gat cgt			768
Pro Gly Thr Ile Ile Leu Ser Gly Arg Pro Ala Val Val Pro Asp Arg			
245	250	255	
gaa gtg ctg tat caa gaa ttt ctc gag gcc tct aga gcg gct ctc att			816
Glu Val Leu Tyr Gln Glu Phe Leu Glu Ala Ser Arg Ala Ala Leu Ile			
260	265	270	
gaa gag ggg caa cgg ata gcc gag atg ctg aag tcc aag atc cag ggc			864
Glu Glu Gly Gln Arg Ile Ala Glu Met Leu Lys Ser Lys Ile Gln Gly			
275	280	285	
tta ctg cag caa gcc tcc aag cag gcc caa gac ata aaa atc gac ggt			912
Leu Leu Gln Gln Ala Ser Lys Gln Ala Gln Asp Ile Lys Ile Asp Gly			
290	295	300	
acc ctg att att ccg aaa gat cgt cgc agc acc ggt aaa agc tgg ggt			960
Thr Leu Ile Ile Pro Lys Asp Arg Arg Ser Thr Gly Lys Ser Trp Gly			
305	310	315	320
aaa ccg ggc ttc ctc atc gat agc ttg cat atc aac cag cga gcc gtc			1008
Lys Pro Gly Phe Leu Ile Asp Ser Leu His Ile Asn Gln Arg Ala Val			
325	330	335	
gtt gca ccg gac aag gag gtc ctt tat gag gct ttt gat gag atg gag			1056
Val Ala Pro Asp Lys Glu Val Leu Tyr Glu Ala Phe Asp Glu Met Glu			
340	345	350	
ctc gcc atg ggc acc aac ccg aaa ccg gag cgt aaa agc aag cgt aac			1104
Leu Ala Met Gly Thr Asn Pro Lys Pro Glu Arg Lys Ser Lys Arg Asn			
355	360	365	
acc aac cgt aaa ccg cag gat att aaa ttc ccg ggt agt ggt cag gtg			1152
Thr Asn Arg Lys Pro Gln Asp Ile Lys Phe Pro Gly Ser Gly Gln Val			
370	375	380	
gtg ggt ggt gtg tac ctg gtg ccg cgt cgt ggt ccg taaggatcc			1197
Val Gly Gly Val Tyr Leu Val Pro Arg Arg Gly Pro			
385	390	395	

<210> 11
 <211> 396
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Amino acid sequence coding for chimeric antigen.

<400> 11

Glu Phe Thr Lys Val Pro Val Ala Tyr Ala Ala Lys Gly Tyr Lys Val
 1 5 10 15

Leu Val Leu Asp Pro Ser Val Ala Ser Thr Leu Gly Phe Gly Ala Tyr
20 25 30

Leu Ser Lys Ala His Gly Val Asn Pro Asn Ile Arg Thr Gly Ile Arg
35 40 45

Thr Val Thr Thr Gly Ala Pro Val Thr Tyr Ser Thr Tyr Gly Lys Tyr
50 55 60

Leu Ala Asp Gly Gly Cys Ala Gly Gly Ala Tyr Asp Val Ile Gly Ser
65 70 75 80

Gly Glu Glu Val Ala Leu Ser Asn Thr Gly Glu Val Pro Phe Tyr Gly
85 90 95

Arg Ala Ile Pro Ile Glu Ala Ile Lys Gly Gly Arg His Leu Val Phe
100 105 110

Cys His Ser Lys Glu Lys Cys Asp Glu Leu Ala Ser Ala Leu Ser Gly
115 120 125

Leu Gly Leu Asn Ala Val Ala Phe Tyr Arg Gly Leu Asp Val Ser Ile
130 135 140

Ile Pro Thr Gln Gly Asp Val Val Ile Val Ser Thr Asp Ala Leu Met
145 150 155 160

Thr Gly Phe Thr Gly Asp Phe Asp Ser Val Val Asp Cys Asn Thr Cys
165 170 175

Ile Thr Gln Gly Ser Gly Leu Val Ser Phe Ala Ser His Val Pro Tyr
180 185 190

Ile Glu Gln Gly Met Gln Leu Ser Glu Gln Phe Lys Gln Lys Ser Leu
195 200 205

Gly Leu Leu Gln Thr Ala Thr Lys Gln Ala Glu Ala Ala Ala Pro Val
210 215 220

Val Gly Thr Pro Lys Ser Arg Arg Pro Glu Gly Arg Ala Trp Ala Gln
225 230 235 240

Pro Gly Thr Ile Ile Leu Ser Gly Arg Pro Ala Val Val Pro Asp Arg
245 250 255

Glu Val Leu Tyr Gln Glu Glu Ala Ser Arg Ala Ala Leu Ile
260 265 270

Glu Glu Gly Gln Arg Ile Ala Glu Met Leu Lys Ser Lys Ile Gln Gly
275 280 285

Leu Leu Gln Gln Ala Ser Lys Gln Ala Gln Asp Ile Lys Ile Asp Gly
290 295 300

Thr Leu Ile Ile Pro Lys Asp Arg Arg Ser Thr Gly Lys Ser Trp Gly
305 310 315 320

Lys Pro Gly Phe Leu Ile Asp Ser Leu His Ile Asn Gln Arg Ala Val
325 330 335

Val Ala Pro Asp Lys Glu Val Leu Tyr Glu Ala Phe Asp Glu Met Glu
340 345 350

Leu Ala Met Gly Thr Asn Pro Lys Pro Glu Arg Lys Ser Lys Arg Asn
355 360 365

Thr Asn Arg Lys Pro Gln Asp Ile Lys Phe Pro Gly Ser Gly Gln Val
370 375 380

Val Gly Gly Val Tyr Leu Val Pro Arg Arg Gly Pro
385 390 395